ANCHORAGE INDUSTRY WORKSHOP SUMMARY

May 6, 2009

9:00am to 2:00pm

Robert E. Atwood Building Anchorage, Alaska

Attendees

Industry Attendees:

Frank Krugh
Dan Lebsack
John Hilgendorf
Bob Bray
Jon Goltz

Kevin Donley
Marilyn Crockett

Faye Sullivan Tracy Whipple Bill Bullock Bill Britt John Hanns

Jim Rooney Judy McCormick National Academy of Sciences

Attendees:
Beverly Huey
Chuck Vita
Shirish Patil
Winston Revie
Richard Rabinow

State Agency Oversight Team

Attendees: Ira Rosen Darcy Harris

Mike Engblom-Bradley

Tim Robertson (Nuka Research)

Project Technical Team

Attendees:
David Montague
Steve Harris
Bettina Chastain
Gretchen Grekowicz

1. Introductions

A total of 27 individuals were in attendance including members of the project team, members of the State Agency Oversight Team (SAOT), industry representatives, and National Academy of Sciences peer review committee members. The meeting began with an introduction by Ira Rosen, ADEC Project Manager, on the project background and status. Tim Robertson of Nuka Research communicated the objectives and ground rules for the meeting, and began introductions of those in attendance. The purpose of the meeting was to obtain input from industry representatives on the Proposed Risk Assessment Methodology released in March 2009. The report describes the methodology inputs, infrastructure scope, technical methodology and a description of how the risk assessment results will be analyzed and compiled into a risk profile.

Presentations were given by Bettina Chastain, EMERALD Project Manager, and David Montague and Steven Harris from ABS Consulting. The meeting was scribed by Gretchen Grekowicz. Opportunity was given to meeting participants to provide oral comments during the meeting or written comments via email, fax, and mail. It was conveyed that all comments are due no later than June 2, 2009.

2. Proposed Risk Assessment Methodology Presentations

Overview Presentation

Bettina Chastain, the EMERALD Project Manager, gave an overview of the background, objectives, and current status of the project, including an overview of the scope of the infrastructure included in the risk assessment, a summary of the stakeholder consultation process and other inputs to the Proposed Methodology, and other details of the Proposed Methodology developed for the Alaska Risk Assessment.

The presentation is available on the project website at:

http://www.dec.state.ak.us/spar/ipp/ara/documents/MethodologyWorkshopPresentationIntro-PrelimScrng.pdf

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Operational Hazards Risk Assessment & Risk Assessment Results Presentation

David Montague from ABS Consulting presented on the methods that will be used to assess operational hazards, including the types of operational hazards, the approach for data gathering and what types of data will be sought, and the details of how operational hazards and their safety, environmental, and reliability risks will be assessed by the State to make decisions on the following questions: What risk management initiatives should be pursued? What risk management initiatives should not be pursued? How much money should reasonably be spent on risk management? How should that money be spent to obtain the most value?

The presentation is available on the project website at:

http://www.dec.state.ak.us/spar/ipp/ara/documents/OpHazards ABS.pdf

Natural Hazards Risk Assessment Presentation

Steven Harris from ABS Consulting presented on the methods that will be used to assess natural hazards, including the types of natural hazards, the approach for data gathering and what types of data will be sought, and the details of how operational hazards and their safety, environmental, and reliability risks will be assessed. The natural hazards assessment will supplement the operational hazards assessment and help estimate the risk contribution to the infrastructure as a result of natural hazard events.

The presentation is available on the project website at:

http://www.dec.state.ak.us/spar/ipp/ara/documents/NatHazards_ABS.pdf

3. Questions, Answers, and Comments

Questions were taken both throughout the presentations and following the presentations. Questions asked and comments from public attendees are denoted by a "Q" or a "C" in the following discussion, while "A" represents the State or Project Team's effort to address the question or comment.

Q: With regard to assigning frequencies of events, will the team use averages (e.g., < 100 years)?

A: Yes.

- **Q:** Did you say that the results will not be presented in the risk matrix format for environmental consequences?
- **A:** No, the team will present the environmental consequence category results in a risk matrix format. To clarify, we will have the ability to sum the results that come from the safety category and the reliability category, but it does not make sense to sum the environmental results because the number is an index.
- Q: How many days outage does a Category 3 reliability consequence relate to?
- A: Category 3 relates to a full two month outage of TAPS.
- **Q:** If the state chooses to mitigate Category 1 risks (highest risks on the scale); will Categories 2 and 3 automatically be reduced similarly?
- **A:** It is possible. Most likely there would be some reduction in Categories 2 and 3, but not an equal amount.

Q: Will the state be able to use the results to compare the risks of the Alaska infrastructure to those of an infrastructure in another state or country?

A: If other system-wide risk assessments of an oil and gas infrastructure system existed, results from such an assessment could be compared to this project. However, the project team is not aware of any other such assessments.

Q: What about an incident that results in a production interruption, but isn't a release? For example, a situation such as high winds in Valdez that stop tanker truck loading. Will this be captured through this methodology?

A: Yes, this would fall into the reliability definition because it is an interruption in production, but the specific example given would probably screen out for reliability consequences.

Q: Will reliability be calculated on an annual basis? If so, will it be calendar year or state fiscal year?

A: The risk assessment will be conducted in terms of discrete outages so it will essentially be a rolling 12-month period.

Q: If you did measure on a set annual basis could you evaluate multiple failures that add up to a maximum outage amount?

A: Yes, that would be possible.

Q: Has anything in the methodology as published been changed as a result of public comments?

A: No changes will be made to the methodology before we receive all public comments, which are due by June 2, 2009.

Attachments

Proposed Risk Assessment Methodology Overview Presentation
Operational Hazards Methodology & Risk Assessment Results Presentation

Natural Hazards Methodology Presentation